

## PATENT

## REMARKS

Applicant appreciates the thorough examination of the application that is reflected in the Office Action dated June 10, 2004. Claims 1-39 are pending in the application. Applicant respectfully requests reconsideration of this application.

**Objections to the Specification**

The Office objects to the specification because the first paragraph does not state that this application is a continuation of application 09/275,524. Applicant amends the specification to include the priority information. Specifically, Applicant amends the specification to add a priority claim to Patent Application No. 09/275,524 entitled "Handoff Control in an Asynchronous CDMA System" filed December 10, 2001, now issued as U.S. Patent No. 6,456,566. These changes add no new matter to the application.

**Art-Based Rejections****Claims 1-10**

The Office rejects claims 1-10 under 35 U.S.C. §102(e) as being anticipated by Schorman et al. (U.S. Patent No. 6,101,175).

Applicant respectfully traverses these rejections for at least the following reasons.

As discussed in the Abstract of the Schorman reference, the Schorman reference relates to:

In a communication system (100) where a remote unit is given a time offset for a base station (102) and hands off to the base station (102) if the remote unit (113) can acquire the base station within a time window surrounding the time offset, a remote unit (113) utilizes the time offset of each base station (supplied by a serving base station (101) via a downlink communication signal (116) and searches for neighboring base stations within the time window surrounding its PN offset. The time window surrounding an individual base station's PN offset is allowed to vary depending upon whether the communication system (100) is time synchronized. In particular, a base station (101) supplies the remote unit (113) with an indication that the communication system (100) is operating in a synchronized or an unsynchronized mode, and the remote unit (113) varies the time window (search window) accordingly. (Emphasis added.)

In rejecting claim 1, the Office cites col. 4, lines 32-35 of the Schorman reference. This section of the Schorman reference discusses that:

**PATENT**

The remote unit monitors other base stations by measuring their pilot strengths and reporting them to the serving base station for handoff decisions. (Emphasis added.)

Claim 1 relates to a method of handoff control for a wireless remote unit having an established communications link with a first base station. Claim 1 requires:

transmitting a message to a network controller identifying a second base station having signal strength sufficient to establish communication;  
receiving a message from said network controller via said first base station identifying said second base station as a selected base station;  
monitoring an overhead channel from said second base station in order to determine a frame synchronization of said second base station; and  
transmitting said frame synchronization to said network controller. (Emphasis added.)

Applicants submit that the cited references fail to teach or suggest, for example, "transmitting a message to a network controller identifying a second base station having signal strength sufficient to establish communication," as required by claim 1. As noted at column 4 lines 2-6, once remote unit 113 has determined a base station having a strongest pilot channel (in this case, base station 101), remote unit uses the timing of the pilot channel to access the sync channel to time align to base station 101. Col. 4, lines 2-6. Schorman does not disclose a message identifying a second base station that is transmitted to a network controller.

For at least the foregoing reasons, Applicants submit that claim 1 is patentable over the cited references. In addition, Applicant respectfully submits that dependent claims 2-9 are separately patentable at least by virtue of their dependency from independent claim 1, and also because those claims recite additional features that are not taught or suggested by the cited references. Applicant submits that claim 10 is also patentable since claim 10 requires "a means for transmitting a message to a network controller identifying a second base station having signal strength sufficient to establish communication."

**Claims 11-16**

The Office rejects claims 11-16 under 35 U.S.C. §102(e) as being anticipated by Wheatley et al. (U.S. Patent No. 5,872,774). Applicant respectfully traverses these rejections for at least the following reasons.

## PATENT

Claim 11 relates to a method of handoff control for a wireless remote unit having an established communications link with a first base station. Claim 11 requires:

receiving a message from said remote unit identifying a second base station having signal strength sufficient to establish communication;

transmitting a message to said remote unit via said first base station identifying said second base station as a selected base station.

receiving a message identifying a frame synchronization of said second base station; and

establishing communication with said remote unit via said second base station such that transmissions from said first base station and transmissions from said second base station arrive at said remote unit approximately synchronized. (Emphasis added.)

As discussed in the Abstract of the Wheatley reference, the Wheatley reference relates to a slave base station attaining synchronization with the reference base station through messages transmitted from and received by a mobile station in the soft handoff region between the reference base station and the slave base station. The Abstract states

First, the round trip delay between the mobile station and the reference base station is measured by the reference base station. Once the mobile station acquires the signal from the slave base station, it measures and reports the difference between the amount of time it takes a signal to travel from the reference base station to it and the amount of time it takes a signal to travel from the slave base station to it. The last measurement necessary is a measurement by the slave base station of the time difference between the time it received the reverse link signal from the mobile and station the time it transmitted a signal to the mobile station. A series of computations described in detail herein are performed upon the measured time values to determine the time difference between the slave base station and an adjustment of the slave base station timing is performed in accordance therewith. (Emphasis added.)

In rejecting claim 11, the Office cites col. 3, lines 30-46 of the Wheatley reference. This section of the Wheatley reference discusses that:

Window sizing is a trade-off between search speed and the probability of missing a strong path lying outside the search window. The base station transmits to the mobile station a message which specifies the PN hypotheses that the mobile station should search relative to its own PN offset. For example, the originating base station may instruct the mobile station to search for a pilot 128 PN chips ahead of its own PN offset. The mobile station in response sets its searcher demodulator 128 chips ahead in the output chip cycle and searches for the pilot using a search window centered about the specified offset. Once the mobile is instructed to a search a PN hypothesis to determine the resources available

## PATENT

for performing a handoff, it is critical that the PN offset of the destination base station pilot is very close in time to the directed offset. The speed of searching is of critical importance near base station boundaries because delays in completing the necessary searches can result in dropped calls.

In CDMA systems in the United States, this base station synchronization is achieved by providing each base station with a Global Positioning Satellite (GPS) receiver. However, there are cases where a base station may not be able to receive the GPS signal. For example, within subways and tunnels the GPS signal is attenuated to a degree that prohibits their use for timing synchronization of base stations or micro base stations. The present invention provides a method and system for providing timing synchronization in these circumstances where a fraction of the network is capable of receiving a centralized timing signal and achieving timing therefrom and a portion of the base stations are not capable of receiving the centralized timing signal. (Emphasis added.)

Applicants submit that the cited references fail to teach or suggest, for example, "transmitting a message to said remote unit via said first base station identifying said second base station as a selected base station," as required by claim 11. The Examiner cites column 3 lines 30 to 46 of Wheatley which describes a base station transmitting "a message which specifies the PN hypotheses (emphasis added) that the mobile station should search relative to its own PN offset." Col. 3, lines 32-34. The text does not describe a base station *identifying* (emphasis added) said second base station as a *selected* (emphasis added) base station.

For at least the foregoing reasons, Applicants submit that claim 11 is patentable over the cited references. In addition, Applicant respectfully submits that dependent claims 12-15 are separately patentable at least by virtue of their dependency from independent claim 11, and also because those claims recite additional features that are not taught or suggested by the cited references.

Claim 16 relates to a wireless remote unit having an established communications link with a first base station. Claim 16 requires:

- means for receiving a message from said remote unit identifying a second base station having signal strength sufficient to establish communication;
- means for transmitting a message to said remote unit via said first base station identifying said second base station as a selected base station;
- means for receiving a message identifying a frame synchronization of said second base station; and
- means for establishing communication with said remote unit via said second base station such that transmissions from said first base station and

## PATENT

transmissions from said second base station arrive at said remote unit approximately synchronized.

Applicant submits that claim 16 is also patentable since claim 16 requires "means for transmitting a message to said remote unit via said first base station *identifying* (emphasis added) said second base station as a *selected* (emphasis added) base station."

**Claims 17-18**

The Office rejects claims 17-18 under 35 U.S.C. §102(e) as being anticipated by Wheatley et al. (U.S. Patent No. 5,872,774). Applicant respectfully traverses these rejections for at least the following reasons.

Claim 17 relates to a remote unit transceiver in a communication system in which a remote unit communicates with other users via at least one base station, and in which each of at least two or more base stations among a plurality of base stations within said system transmits a unique pilot signal. Claim 17 requires:

a pilot signal measurement circuit which measures strength of pilot signals received from a set of neighboring base stations;

a controller which generates a first signal strength message when a measured pilot signal of a target base station from among said set of neighboring base stations exceeds a first predetermined level;

a remote unit transmitter which transmits said first signal strength message to at least one base station with which said remote unit is currently communicating, said first signal strength message identifying said target base station; and

a demodulator which receives a first direction signal from said at least one base station and, in response to said first direction signal, monitors a forward link transmission from said target base station to determine a frame synchronization of said target base station.

Claim 17 requires "a controller which generates a first signal strength message when a measured pilot signal of a target base station from among said set of neighboring base stations exceeds a first predetermined level," "said first signal strength message identifying said target base station."

In rejecting claim 17, the Office cites col. 2, lines 30-42 of the Wheatley reference. This section of the Wheatley reference discusses that:

**PATENT**

The base station candidates can be divided into four sets. The first set, referred to as the Active Set, comprises base stations which are currently in communication with the mobile station. The second set, referred to as the Candidate Set, comprises base stations whose signals have been determined to be of sufficient strength to be of use to the mobile station but are not currently being used. Base stations are added to the candidate set when their measured pilot energy exceeds a predetermined threshold T<sub>sub</sub>ADD. The third set is the set of base stations which are in the vicinity of the mobile station (and which are not included in the Active Set or the Candidate Set). And the fourth set is the Remaining Set which consists of all other base stations. (Emphasis added.)

Applicant finds no signal strength message identifying a target base station that is generated by a controller in Wheatley. In addition to other text, Examiner refers to column 10 lines 25-67 and column 11 lines 1-6. "Searcher controller 18 provides an offset hypothesis to PN generator 20," but searcher controller 18 does not generate a signal strength message identifying a target base station.

Thus, Applicant submits that claim 17 is patentable and dependent claim 18 is separately patentable at least by virtue of its dependency from independent claim 17, and also because claim 18 recited additional features that are not taught or suggested by the cited references.

**Claims 19-25 and 31-34**

The Office rejects claims 19-25 and 31-34 under 35 U.S.C. §102(e) as being anticipated by Wheatley et al. (U.S. Patent No. 5,872,774). Applicant respectfully traverses these rejections for at least the following reasons.

Claim 19 relates to a method for directing communication between a remote unit and base stations in a spread spectrum communication system having a plurality of base stations and in which the remote unit communicates with another system user via at least one base station.

Claim 19 requires:

- providing to said remote unit an active list identifying one or more base stations through which active communication is established;
- receiving from said remote unit a candidate list identifying at least one target base station;
- determining an availability of system resources at said target base station;
- providing to said remote unit a selected list identifying said target base station;
- receiving from said remote unit an alignment message identifying synchronization information concerning said target base station;

## PATENT

directing said target base station to establish communication with said remote unit in accordance with said synchronization information; and  
providing to said remote unit a second active list identifying said target base station.

Claim 19 requires "determining an availability of system resources at said target base station."

In rejecting claim 19, the Office cites col. 2, lines 43-55 of the Wheatley reference. This section of the Wheatley reference discusses that:

In IS-95, a base station candidate is characterized by the phase offset of the pseudonoise (PN) sequence of its pilot channel. When the mobile station searches to determine the strength of the pilot signal from a candidate base station it performs a correlation operation wherein the filtered receiver signal is correlated to a set of PN offset hypotheses. The method and apparatus for performing the correlation operation is described in detail in co-pending U.S. patent application Ser. No. 08/687,694, filed on Jul. 26, 1996, entitled "METHOD AND APPARATUS FOR PERFORMING SEARCH ACQUISITION IN A CDMA COMMUNICATION SYSTEM", which is assigned to the assignee of the present invention and incorporated by reference herein. (Emphasis added.)

As such, column 2 lines 43-55 of Wheatley describe the mobile station performing a correlation operation. The cited text does not describe determining availability of system resources at a target base station.

Thus, Applicant submits that claim 19 is patentable. In addition, Applicant respectfully submits that dependent claims 20-24 are separately patentable at least by virtue of their dependency from independent claim 19, and also because those claims recite additional features that are not taught or suggested by the cited references.

Claim 25 relates to a network controller in spread spectrum communication system in which a remote unit communicates with another system user via at least one base station and wherein each base station transmits an identifying pilot signal. Claim 25 requires:

means for providing to said remote unit an active list identifying one or more base stations through which active communication is established;  
means for receiving from said remote unit a candidate list identifying at least one target base station;  
means for determining an availability of system resources at said target base station;

## PATENT

means for providing to said remote unit a selected list identifying said target base station;

means for receiving from said remote unit an alignment message identifying synchronization information concerning said target base station;

means for directing said target base station to establish communication with said remote unit in accordance with said synchronization information; and

means for providing to said remote unit a second active list identifying said target base station.

In rejecting claim 25, the Office cites col. 2, lines 43-55 of the Wheatley reference reproduced above.

For at least the reasons discussed above, Applicant submits that claim 25 is patentable since the cited references fail to teach or suggest "means for determining an availability of system resources at said target base station."

Claim 30 relates to a method for directing communications between a remote unit and base stations in a spread spectrum communication system in which the remote unit communicates with another system user via at least one base station. Claim 30 requires:

providing to said remote unit a neighbor list identifying one or more base stations;

providing to said remote unit an active list identifying one or more base stations through which active communication is established;

receiving from said remote unit a candidate list identifying at least one target base station;

determining an availability of system resources at said at least one target base station; and

providing to said remote unit an active list identifying said at least one target base station;

wherein said neighbor list comprises a series of entries, said entries comprising information identifying a reference base station and a PN offset wherein a timing of said reference base station is used as a reference timing for said PN offset.

Claim 34 relates to an apparatus for directing communications between a remote unit and base stations in a spread spectrum communication system in which the remote unit communicates with another system user via at least one base station. Claim 34 requires:

means for providing to said remote unit a neighbor list identifying one or more base stations;



## PATENT

means for providing to said remote unit an active list identifying one or more base stations through which active communication is established;

means for receiving from said remote unit a candidate list identifying at least one target base station;

means for determining an availability of system resources at said at least one target base station; and

means for providing to said remote unit an active list identifying said at least one target base station;

wherein said neighbor list comprises a series of entries, said entries comprising information identifying a reference base station and a PN offset wherein a timing of said reference base station is used as a reference timing for said PN offset.

In addition, Applicant submits that claims 30-34 are patentable since they require "determining an availability of system resources at said at least one target base station." In addition, Applicant respectfully submits that dependent claims 31-34 are separately patentable at least by virtue of their dependency from independent claim 30, and also because those claims recite additional features that are not taught or suggested by the cited references.

Claims 26 and 28

The Office rejects claims 26 under 35 U.S.C. §102(e) as being anticipated by Wheatley et al. (U.S. Patent No. 5,872,774). Applicant respectfully traverses these rejections for at least the following reasons.

Claim 26 relates to a method of time alignment in a wireless communications system in which a remote unit is capable of communication with one or more base stations simultaneously. Claim 26 requires:

receiving a first forward link transmission from a first base station having a first frame alignment;

receiving a second forward link transmission from a second base station having a second frame alignment wherein said second frame alignment comprises information concerning frame boundaries and excludes information concerning an absolute frame number;

selecting a first arbitrary frame alignment;

combining said first forward link transmission and said second forward link transmission according to said first arbitrary frame alignment creating a combined signal;

determining whether a performance indication of said combined signal is within expected limits; and

## PATENT

combining said first forward link transmission and said second forward link transmission using a second arbitrary frame alignment if said performance indication is not within the expected limits. (Emphasis added.)

Claim 26 requires "selecting a first arbitrary frame alignment" and "combining said first forward link transmission and said second forward link transmission using a second arbitrary frame alignment." In rejecting claim 26, the Office cites col. 2, lines 30-42 of the Wheatley reference, reproduced below:

The base station candidates can be divided into four sets. The first set, referred to as the Active Set, comprises base stations which are currently in communication with the mobile station. The second set, referred to as the Candidate Set, comprises base stations whose signals have been determined to be of sufficient strength to be of use to the mobile station but are not currently being used. Base stations are added to the candidate set when their measured pilot energy exceeds a predetermined threshold  $T_{ADD}$ . The third set is the set of base stations which are in the vicinity of the mobile station (and which are not included in the Active Set or the Candidate Set). And the fourth set is the Remaining Set which consists of all other base stations. (Emphasis added.)

Applicant submits that claim 25 is patentable since the cited references fail to teach or suggest "selecting a first arbitrary frame alignment" and "combining said first forward link transmission and said second forward link transmission using a second arbitrary frame alignment." Applicant finds no first *arbitrary* frame alignment, nor a second *arbitrary* frame alignment in Wheatley.

Thus, Applicant submits that claim 26 is patentable.

Claim 28 relates to an apparatus for time alignment in a wireless communications remote unit capable of communication with one or more base stations simultaneously. Claim 28 requires:

means for receiving a first forward link transmission from a first base station having a first frame alignment;

means for receiving a second forward link transmission from a second base station having a second frame alignment wherein said second frame alignment comprises information concerning frame boundaries and excludes information concerning an absolute frame number;

means for selecting a first arbitrary frame alignment;

means for combining said first forward link transmission and said second forward link transmission according to said first arbitrary frame alignment;

## PATENT

means for determining whether a performance indication is within expected limits; and

means for combining said first forward link transmission and said second forward link transmission using a second arbitrary frame alignment if said performance indication is not within the expected limits.

Applicant submits that claim 28 is also patentable since claim 28 requires a "means for selecting a first *arbitrary* (emphasis added) frame alignment" and "combining said first forward link transmission and said second forward link transmission using a second *arbitrary* (emphasis added) frame alignment."

**Claims 27 and 29**

The Office rejects claims 27 and 29 under 35 U.S.C. §102(e) as being anticipated by Wheatley et al. (U.S. Patent No. 5,872,774). Applicant respectfully traverses these rejections for at least the following reasons.

Claim 27 relates to a method of time alignment in a wireless communications system in which a remote unit is capable of communication with one or more base stations simultaneously.

Claim 27 requires:

receiving a first forward link transmission from a first base station having a first frame alignment;

receiving a second forward link transmission from a second base station having a second frame alignment wherein said second frame alignment comprises information concerning frame boundaries and excludes information concerning an absolute frame number;

combining said first forward link transmission and said second forward link transmission according to a first frame alignment hypothesis to determine a first performance indication;

combining said first forward link transmission and said second forward link transmission according to a second frame alignment hypothesis to determine a second performance indication; and

comparing said first and second performance indications in order to determine a most likely absolute frame alignment. (Emphasis added.)

In rejecting claim 27, the Office cites col. 1, lines 49-60 of the Wheatley reference. This section of the Wheatley reference discusses that:

A method for simultaneously demodulating data that has traveled along different propagation paths from one base station and for simultaneously demodulating data redundantly provided from more than one base station is

## PATENT

disclosed in U.S. Pat. No. 5,109,390 (the '390 patent), entitled "DIVERSITY RECEIVER IN A CDMA CELLULAR COMMUNICATION SYSTEM", assigned to the assignee of the present invention and incorporated by reference herein. In the '390 patent, the separately demodulated signals are combined to provide an estimate of the transmitted data which has higher reliability than the data demodulated by any one path or from any one base station. (Emphasis added.)

The Examiner refers to column 1 lines 49 to 60, which describes "demodulating data that has traveled along different propagation paths," and refers to column 10 lines 3 to 63, which describes the operation of the mobile station searcher 50.

Applicant finds no combining according to a first frame alignment hypothesis to determine a first performance indication in Wheatley. Thus, Applicant submits that claim 25 is patentable since the cited references fail to teach or suggest "combining said first forward link transmission and said second forward link transmission according to a first frame alignment hypothesis to determine a first performance indication," wherein the first forward link transmission is from a first base station having a first frame alignment and the second forward link transmission is from a second base station having a second frame alignment.

Claim 29 relates to an apparatus for time alignment in a wireless communications system in which a remote unit is capable of communication with one or more base stations simultaneously. Claim 29 requires:

means for receiving a first forward link transmission from a first base station having a first frame alignment;

means for receiving a second forward link transmission from a second base station having a second frame alignment wherein said second frame alignment comprises information concerning frame boundaries and excludes information concerning an absolute frame number;

means for combining said first forward link transmission and said second forward link transmission according to a first frame alignment hypothesis to determine a first performance indication;

means for combining said first forward link transmission and said second forward link transmission according to a second frame alignment hypothesis to determine a second performance indication; and

means for comparing said first and second performance indications in order to determine a most likely absolute frame alignment. (Emphasis added.)

## PATENT

Claim 29 is also patentable since claim 29 requires "means for combining said first forward link transmission and said second forward link transmission according to said first arbitrary frame alignment," wherein the first forward link transmission is from a first base station having a first frame alignment and the second forward link transmission is from a second base station having a second frame alignment.

Claims 35-39

The Office rejects claims 35 and 39 under 35 U.S.C. §102(e) as being anticipated by Wheatley et al. (U.S. Patent No. 5,872,774). Applicant respectfully traverses these rejections for at least the following reasons.

Claim 35 relates to a method for directing communications between a remote unit and base stations in a spread spectrum communication system in which the remote unit communicates with another system user via at least one base station. Claim 35 requires:

- receiving at said remote unit an active list identifying one or more base stations through which active communication is established;

- receiving at said remote unit a neighbor list identifying one or more base stations;

- measuring at said remote unit a signal strength of a pilot signal transmitted by each base station having an entry on said neighbor list;

- transmitting a first message from said remote unit, said first message identifying a candidate list comprising an entry corresponding to at least one target base station; and

- receiving at said remote a new active list of base station comprising an entry corresponding to said at least one target base station;

- wherein said neighbor list comprises a series of entries, said entries comprising information identifying a reference base station and a PN offset wherein a timing of said reference base station is used as a reference timing for said PN offset. (Emphasis added.)

Claim 39 relates to an apparatus for directing communications between said remote unit and said base stations in a spread spectrum communication system in which a remote unit communicates with another system user via at least one base station. Claim 39 requires:

- means for receiving at said remote unit an active list identifying one or more base stations through which active communication is established;

- means for receiving at said remote unit a neighbor list identifying one or more base stations with a high probability of having signal strength sufficient to establish communication;

## PATENT

means for measuring at said remote unit a signal strength of a pilot signal transmitted by each base station having an entry on said neighbor list;

means for transmitting a first message from said remote unit, said first message identifying a candidate list comprising an entry corresponding to at least one target base station; and

means for receiving at said remote a new active list of base station comprising an entry corresponding to said at least one target base station;

wherein said neighbor list comprises a series of entries, said entries comprising information identifying a reference base station and a PN offset wherein a timing of said reference base station is used as a reference timing for said PN offset. (Emphasis added.)

In rejecting claim 35, the Office cites Figures 4 and 5, column 2 lines 30-42, column 5 lines 5 to 14, column 10 lines 25 to 67, and column 11 lines 1 to 5 of the Wheatley reference. The text at column 10, line 25 through column 11 line 6 of the Wheatley reference discusses that:

Searcher controller 18 provides an offset hypothesis to PN generator 20. The offset hypothesis is determined in accordance with a signal transmitted to mobile station 60 by reference base station 62. In the exemplary embodiment, the received signal is modulated by quaternary phase shift keying (QPSK), so PN generator 20 provides a PN sequence for the I modulation component and a separate sequence for the Q modulation component to despreading element 6. Despreading element 6 multiplies the PN sequence by its corresponding modulation component and provides the two output component products to coherent accumulators 8 and 10.

Coherent accumulators 8 and 10 sum the product over the length of the product sequence. Coherent accumulators 8 and 10 are responsive to signals from searcher controller 18 for resetting, latching and setting the summation period. The sums of the products are provided from summers 8 and 10 to squaring means 14. Squaring means 14 squares each of the sums and adds the squares together.

The sum of the squares is provided by squaring means 12 to non-coherent combiner 14. Noncoherent combiner 14 determines an energy value from the output of squaring means 12. Noncoherent accumulator 14 serves to counteract the effects of a frequency discrepancy between the base station transmit clocks and the mobile station receive clock and aids in the detection statistic in a fading environment. Noncoherent accumulator 14 provides the energy signal to comparison means 16. Comparison means 16 compares the energy value to predetermined thresholds supplied by searcher controller means 18. The results of each of the comparisons is then feedback to searcher controller 18. The results feedback to searcher controller 18 include both the energy of the correlation and the PN offset that resulted in the measurement.

## PATENT

In the present invention, searcher controller 18 outputs the PN phase at which it synchronized to base station 64. This offset is used to compute the time error as described further herein.

In the exemplary embodiment, when mobile station 60 acquires slave base station 64 it computes the difference between the time it received the signal from slave base station 64 and the time it received the signal from reference base station 62. This value is provided to message generator 52 which generates a message indicative of the difference value. The message is transmitted as signaling data on the reverse link to reference base station 62 and slave base station 64 which send the message back to base station controller 66.

#### VI. Measurement of Delay Between Transmission of Forward Link Signal From Slave Base Station and Receipt of Reverse Link Signal at Slave Base Station

In step 311, slave base station 64 measures the time difference between it received the reverse link signal from mobile station 60 (T.sub.2) and the time it transmitted its forward link signal to mobile station 60 (T.sub.1). Slave base station 64 stores the PN offset at the time it transmits its forward link signal and upon detection of the reverse link signal from mobile station 60 computes the time difference RTD.sub.2. In the exemplary embodiment, this computed time difference is provided by slave base station 64 to base station controller 66 and the computation of the timing adjustment is conducted at base station 66. It will be understood by one skilled in the art that the present invention is easily extended to the case wherein the computations are performed at the base stations or mobile stations.

#### VII. Timing Adjustment of Slave Base Station

Base station controller 66, in response, performs the computation described in equation (12) and sends an indication of the necessary timing adjustment to slave base station 64. Referring back to FIG. 7, the timing adjustment signal is received by slave base station 64 at control processor 100. Control processor 100 generates and provides a control signal to timing adjustment processor 99. Timing adjustment processor 99 generates a signal which changes the time of timing source 98 by the amount indicated in the signal from base station controller 66. (Emphasis added.)

Claims 35 and 39 require "transmitting a first message from said remote unit, said first message identifying a candidate list comprising an entry corresponding to at least one target base station."

Applicant submits that there is no mention of transmission of the candidate list in the cited text.

Thus, for at least this reason, Applicant submits that claims 35 and 39 are patentable. In addition, Applicant respectfully submits that dependent claims 36-38 are separately patentable at

**PATENT**

least by virtue of their dependency from independent claim 35, and also because those claims recite additional features that are not taught or suggested by the cited references.